Predicted Bioaccumulation factor for 1897-45-6 from Consensus method

Prediction results

| Endpoint | Experimental value (CAS= 1897-45-6) Sources: Dimetrov 2005, Arnot 2006, and Zhao 2008 | Predicted value ^a |
|------------------------------|---|------------------------------|
| Bioaccumulation factor Log10 | 1.25 | 1.65 |
| Bioaccumulation factor | 17.82 | 44.20 |

^aNote: the test chemical was present in the external test set.

| ndividual Predictions | | Test chemica |
|-------------------------|--------------------------|--------------|
| Method | Predicted value Log10 | |
| Hierarchical clustering | 1.81 | |
| Single model | 2.22 | |
| Group contribution | 2.00 | |
| Nearest neighbor | 0.54 | |

<u>Predictions for the test chemical and for the most similar chemicals in the external test set</u>

Note: No chemicals in the test set exceed a minimum similarity coefficient of 0.5 for comparison purposes

Predictions for the test chemical and for the most similar chemicals in the training set

If the predicted value matches the experimental values for similar chemicals in the training set (and the similar chemicals were predicted well), one has greater confidence in the predicted value.

| Chemicals | MAE* | | | |
|-------------------------------|------|--|--|--|
| Entire set | 0.42 | | | |
| Similarity coefficient ≥ 0.5 | 0.32 | | | |
| *Mean absolute error in Log10 | | | | |

| | CAS | Structure | Similarity | Experimental value | Predicted value |
|--|-----|-----------|------------|--------------------|-----------------|
|--|-----|-----------|------------|--------------------|-----------------|

| 1897-45-6 (test chemical) | | 1.25 | 1.65 |
|------------------------------|------|------|------|
| 91-15-6 | 0.84 | 0.40 | 0.58 |
| 626-17-5 | 0.77 | 0.40 | 0.63 |
| 1689-84-5 | 0.70 | 0.83 | 1.36 |
| 623-26-7 | 0.69 | 0.16 | 0.63 |
| 767-00-0 | 0.58 | 0.91 | 0.70 |